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REMARKS – General

5 Dantu's disclosure is a cellular mobile phone switching system (which requires real-time speed) implement with MPLS virtual path protocol; the Internet is a network with all kinds of equipments and different connections/speeds. The down side of Internet is connectivity problems (Errors, Delay or Latency, Throughput issues) as pointed out by Crowcroft; these problems make it impossible to build a "call" switching system like Dantu's over Internet or with Internet connection. Therefore it is impossible to combine
10 Dantu and Crowcroft as prior art references for the applicant's current invention. The other references introduced by the last OA are for solving different problems; it is very hard and conflicting to combine them.

The References and Differences of the Present Invention Thereover

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Applicant will discuss the reference and the general novelty of the present invention and its unobviousness over the references.

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The applicant's current invention provides a wireless personal mobile two-way message communication bases on wireless networking and Internet technology. A common two-way communication application is instant messenger or a walkie-talkie phone. This is a completely different system from a typical mobile cell-phone communication system and its applications. A typical cell phone communication network normally involves a big number of base stations (providing wireless access to
25 cell phone terminals), base station controllers, mobile switching center, back haul network and so on, real-time call switching, handoff, Qos and so on require a cellular network to be a closed proprietary communication network. Internet access of cell phone is provided via a few special gateway equipments for the whole network. The applicant's current invention uses wireless access point to provide wireless Internet

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access to personal mobile access device (PMAD), and using an Internet based server domain (TDMN) to provide communication commanding for the communication among the PMADs and TDMN. More importantly, the roaming of PAMD among APs around the Internet creates the largest single wireless mobile networking application.

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Dantu et al. ("Dantu") (US Patent 7,068,624 B1) is a MPLS based (see fig.3 and its explanation) cellular network but not an Internet based network or Internet connection based system. (see fig.2). A cellular network formed by architectural "wireless router" (really a wireless base station with MPLS and IP routing capability) and "wireless router coverage" (see fig.2 30, 32,40s) is connected to both a LEGACY GATEWAY (see fig.2, 54) and below that to a legacy cellular mobile network (see fig.2, 56), and a MEDIA GATEWAY (see fig.2, 50) and beyond that to PSTN (see fig.2, 52). Because of to the network architecture and function requires MPLS implementation, it is impossible for Dantu to take the advantage of Internet, even though Dantu has some server that might have Internet connection for the purpose of client (mobile unit) communication path management but not data payloads. (see fig.1, 12, 23 and fig.3, 86, 88, 89 and the descriptions).

The whole communication system of Dantu is based on MPLS virtual path protocol even though it's claimed to be an IP network. (see fig.5A and Fig.5B, Fig.15 and description, specifically fig.19, fig.20 about the MPLS path switching and description), The wireless router is not just a "router", according to Dantu (fig.6, 30), the wireless router is a upgraded full function cellular base station with MPLS switch routing capability. Dantu's router is a cell phone base station for better call handling (col.3, lines 53-60) "providing a distributed architecture for a wireless access network. In particular, call processing functionality is distributed to the base station or cell site level. Call set-up, resource reservation, air bandwidth allocation and switching functions are performed at the cell sites. As a result, traffic may be efficiently processed at the cell sites and centralized choke-points in the wireless network are reduced or

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eliminated." Specifically, "IP ROUTER" is only a small fraction of the communication block 178 of the complicated traffic controller 154. This is a proprietary stand alone MPLS cell phone network with "wireless router" (fig.1, 18 and 16) implement at "cell site level" and wireline routers (fig.1, 14) interconnecting and managed by servers (fig.1, 13). Two MPLS communication path is essential for the whole system, especially for the communication among wireless routers. (see fig.3, 70 72 and their descriptions). Specifically, inter-"WIRELESS ROUTER" communication is based on MPLS LSP protocol, where Dantu (col.7 line 56 – col.8 line 26) "the wireless router links 32 include a wireline specific virtual tunnel, or path 70 and a wireless specific virtual tunnel, or path 72. The wireline virtual tunnel 70 transports wireline The wireline virtual tunnel 70 may be set up and maintained by one or more wireline-specific control channels 74. The control channels 74 include signaling channel 74a and routing message channel 74b. The wireless virtual tunnel 72 ... may be set up and maintained by one or more wireless-specific control channels 76. ... the control channels 76 may include a signaling channel 76a used by a signaling protocol 78 and a routing message channel 76b used by a radio routing protocol 79.

... the wireline protocol traffic comprises IP packets and the wireless protocol traffic comprises radio frames. ... the wireline virtual tunnel 70 is used by the wireless routers 30 for call set up, resource reservation, air bandwidth allocation and routing of calls in the wireless network 10. The wireless virtual tunnel 72 is used for soft handoff and mobility management of calls within the wireless network 10. ...

... the virtual paths 70 and 72 are each a multi-protocol label switch (MPLS) path. The MPLS paths provide high speed multicasting and rerouting of traffic for soft handoff operations"

It is impossible for Dantu's wireless router 30 to communicate over Internet, because it has to have two MPLS path to connect in between. This is extremely hard to achieve even today (7 years after), because very high-end fiber optical circuit with high-end

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MPLS supporting router is necessary, and the protocol needs to be implemented all the way throughout the entire network. Therefore, even if one can build a circuit like that, the cost is extremely high and availability of the location is very limited. Today's primary Internet circuits are DSL and Cable modem, and none of them supports

5 MPLS. Further more, even if the circuit is constructed, technically, it is still vulnerable to long latency and stability issue because of Internet is an international public network. It is very hard and limited to achieve cellular phone service Qos. The fact that Dantu (col.3, lines 54-61) focus on "cell site level" problem solving shows that Dantu aware of the problem, and trying to solve the issue "geo-locally".

10 The implementation of TDMN in the applicant's current invention creates a different wireless communication system that is most flexibly using Internet network, providing PMAD wireless access to wherever there is Internet connection, and it does not have to be MPLS supporting and carrier specific. (page.7, lines 4-6) "The internet connection port 204 of AP 20 can connect AP 20 to internet 11 via internet connection
15 110, which can be cable modem, ADSL modem, or other type of internet connection." This is much different from Dantu's system, where the wireline router layer (fig. 1,14) is MPLS specific LSP virtual path switching/routing clouds not a Internet (this edge router of the cloud might have Internet connections, the main network is not open for Internet access). This layer together with "wireless" router layer provides "call"
20 switching for mobile phone (fig.1, 44).

Specifically, the TDMN is internet based, which means every component of the domains is connecting to Internet, (fig 1A, 10, Fig. 1B-1D). TDMN is part of Internet, or a group of server features virtual operational domain based on Internet. Every PMAD connects to TDMN domains via Internet connection; every AP that has Internet
25 connection is the gateway device for PMAD access Internet and joint the TDMN service. TDMU is carried, forward, stored by TDMN.

The Applicant's present invention provides the system function means of TDMN to ensure the receiving PMAD receives all the TDMUs when the connection between the

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receiving PMAD and TDMN is interrupted. Therefore the unpredictability of Internet connection quality is overcome.

The primary difference between Dantu's disclosure and the applicant's current invention:

- 5 1) different network, Dantu's MPLS based cellular phone network vs. the applicant's Internet based network;
- 2) Dantu's wireless router (base station) is a much more complicated equipment (fig.6, 30) compared with the applicant's AP (fig.2, 20), so as to the system features and requirements;
- 10 3) Dantu's router connection (Fig.1, 32 and Fig.3, 32 in detail) is very complicated and cannot be an Internet connection like the AP's (Fig.2, 110 and Fig, 1, 110A, 110B).
- 4) Completely different communication packet scheme, where Dantu uses MPLS to carry IP packet, the applicant's TDMU protocol is built on top of TCP/IP.
- 15 5) Dantu's management servers/layer cannot be on the Internet with Internet connection because of real time cell phone communication system management requirements.

In conclusion, Dantu discloses a completely different communication system with the
20 system of the applicant's current invention. In the applicant's current invention, all of the communication between/among Server means, APs, and PMADs are Internet network, Internet connection and IP based. Internet is utilized as the main and only access and communication exchange network to reach out to the largest single world-wide coverage network. Because of this fundamental difference, the system
25 architecture, function, and method are completely different between the applicant's current invention and Dantu's disclosure.

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In "**The Internet: a tutorial**", Crowcroft describes Internet as "The Internet is a world-wide packet-switched (**should be routed**) network that connects together well over 10 million computers in over 100 centuries for the purpose of information sharing."

1) Crowcroft defined the size and coverage (see abstract on top part of page 113)

5 2) hosts, router, and network elements (see left-hand column on page 113)

3) The network and connection, Internet is a huge network interconnected by all kinds of connection with no regulation of unity, as long as there is a TCP IP connection, this host is connected to Internet, most common connection is provided DSL, Cable modem. Most of the connection are not stable, speed and stability varied on almost every connection at
10 different time. Big geographical distance bares nature latency with signal travel at light speed over long distance, and much higher latency caused by equipments. Crowcroft further addressed Internet network; connection and communication as:

a) performance of networking variety, "speed at which a packet goes once it starts to be transmitted is the speed of the wire ..., the range of communication technology
15 speeds is illustrated in Fig.2" (see page 114, right bottom paragraph, and fig.2)

b) protocol, "TCP/IP is often used as the name for the Internet protocol" (See page 115, left side, protocol)

c) There are three key parameters to worry about: Errors, Delay or Latency, Throughput, (see page 121, left middle side, Performance parameters)

20 d) It has problem of carry Real-time traffic: Internet cannot guarantee the communication speed of the traffic. (see page 121, section real-time traffic)

Further, in conclusion, due to multi-path multi-layer MPLS router inter connection is essential of Dantu, Dantu's inter wireless router connections and other connections cannot be Internet connections; even if we want to combine Dantu with the rest of the
25 references, those skilled in the art would find it physically impossible to combine them; the main system architecture, communication, connections have to be changed, resulting in functional changes and producing in-operative combination.

Objections to Claim rejections under 35 U.S.C. 103(a)

The last O.A. rejected the Claims 28-32,35,44,45 and 47 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft. The Applicant respectfully requests reconsideration of these rejections.

Regarding Rejection of Claim 28

The last OA notes that "a plurality of wireless Access Points (APs) with Internet connection and providing wireless networking access is taught as wireless router 30 see e.g., figures 1,3,6,15 of Dantu. See also column 6, lines 4-45 of Dantus" The last OA also points out that "a plurality of Personal Mobile Access Device (PMAD) with wireless networking capability for getting wireless Internet access via said AP, and client operation function means with said server means is taught as mobile devices 44 in figure 1 of Dantu. See also column 6, lines 46-59 of Dantu. Wherein said PMAD is personal mobile communication device with user and media interfaces, and wireless networking means to communicate with said APs is taught e.g., at column 6, lines 46-59 of Dantu. Whereby the PMAD access Internet wirelessly through the AP and communicate with the server means via Internet is taught e.g., in figure 1 since the wireless routers communicate through the wireline-specific router topology."

As discussed before, the applicant respectfully point out that Dantu's system designed with wireless router (fig.1, 16) together with wireline router cloud (fig.1, 14) providing "call" switching service for wireless mobile phone (fig.1, 44) with wireless cellular network (fig.1, 18). The whole system is managed by control servers (fig.1, 13). To ensure communication quality, both router layer cannot interconnect by regular Internet connections. The last OA already point out that "... e.g., in figure 1 since the wireless routers communicate through the wireline-specific router topology." The wireline specific router topology of Dantu is a

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proprietary MPLS/IP network not Internet. Specifically, Dantu's embodiment is to use MPLS protocol with high speed switching capacity to overcome bandwidth bottleneck, handoff drop, and other problems of legacy cellular system (Col. 1, lines 60-67). Dantu's system cannot be built on Internet connections and across
5 Internet. It is against the technical purpose of Dantu, if to built Dantu's system based on Internet. E.g. if replace Dantu's multi-path MPLS router interconnections (fig.1, 22 and 32, fig.3, connections of 32) with Internet connections (e.g. DSL or cable modem), the whole system cannot function.

To summarize Dantu's embodiment:

- 10 (a) Dantu's wireless router (fig.1, 16, fig.2, 30 and fig.3, 30) is not connecting to Internet (fig.3, connection 32, is not a Internet connection) and providing Internet access for mobile terminals (fig.1, 44).
- (b) main functions of servers (fig.1, 13) is to control the routers (fig.1, 14 and 16) for providing better than legacy wireless cellular (fig.1, 10, and fig.2, 40)
15 service to mobile phone (fig.1, 44).
- (c) Wireless mobile phone (fig.1, 44) access servers via proprietary cellular router cloud (Fig.2, 30,40; Fig.1, 18,16 and 14) not Internet.
- (d) wireless mobile phones (fig.1,44) might (very minimal, if yes) have
20 communication with servers (fig.1, 13) is for mobile phone service addressing, accounting and RF resource control (see fig.4A, 4B and 4C, and part of fig.7).

The applicant appreciates that the last OA already agrees with above conclusion as "Dantu may be silent or deficient to the further limitation one server means running over the Internet. Thus it may also not be clear from the reference that where by the APs communicating with the server means via the Internet; whereby the server means enables, controls, and guarantees the PMAD to PMAD communication over the Internet without message loss; and where by the PMADs communicating with each other via the server means and Internet." This clearly
25 shows that the last OA agrees that Dantu's disclosure is not an Internet based system like the applicant's current invention. The wireless router (base station),

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mobile unit, and servers are not running on Internet, and they are different from the applicant's AP, PMAD and TDMN server domains. Based on we've discussed so far, Dantu's disclosure is not and cannot be an Internet based system.

However, for the purpose of the rejection, the last OA further points out "see, e.g.,

5 fig.1 where the 'server means' is such as the control layer 13. The examiner notes that it may not be clear from the figure that the control layer 13 is found on a server within the Internet, see e.g., figure 3 of Dantu and column 5, lines 34-50. The servers provided in the control layer further ensure that there is message loss within the network."; And, the last OA further points out "Crowcroft teaches the further recited
10 limitation above at e.g., left-hand column on page 113". And "The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify Dantu by clarifying that it is well known in the art prior to applicant's invention to implement the control layer applications 13 on servers on the Internet."

15 The Internet has existed for a long time. In addition to "left-hand column on page 113" as pointed out by last OA, Crowcroft wrote (in subject, top of page 113) "The Internet is a world-wide packet-switched (**should be routed**) network that connects together well over 10 million computers in over 100 countries for the purpose of
20 information sharing."

Even if the servers of Dantu (fig.1,13) may have Internet connection, it would have to be for server themselves remote management only. Because the whole system is designed to function independently (fig.2) without implementing servers (fig.1,13)
25 over Internet nor Dantu intends to do so. In contrast, putting servers on the Internet will cause system fail, because:

(a) Whole cellular network management system will be exposed to whole Internet world-wide, causing security, and many other very complicated technical difficulties.

- (b) Internet connections are needed for servers (fig.1, 13) to connect with router clouds (Fig.1, 14, 16). However, according to Dantu (fig.3, MGCP, COPS ..., and col.8, lines 56-65) "The wireless routers 30 may communicate with the traffic and control interfaces 80 through media gateway control protocol (MGCP), common open policy service (COPS) and other suitable protocols." Obviously, a special communication path/connection over Internet is required to do so. This is technical impossible. It is unrealistic to manage a cellular wireless network at one country over the Internet from the servers at other country. That special circuit over (across) the Internet cannot be built even today.
- (c) Even if the special circuit could be built, the long communication latency over Internet still cannot meet the needs. Crowcroft teaches latency and throughput problems in left side of page 121. In fact, a typical cell phone communication establishes in millisecond (ms) level; a typical Internet point-to-point latency from east to west coast of USA is about 70ms; a typical DSL local loop latency is about 35 ms to 95 ms; and cable modem connection is far more unstable than DSL connection; an oversea Internet is typically over 125ms latency. However, a cellular phone handoff time-out is less than 50ms. System decision making and processing need be much quicker than that, or the "call" will be dropped. It is fundamentally impossible for mobile manager server (fig.3, 88) to manage a wireless router (base station) (fig.3,30) somewhere else with such big of latency. Similar, other servers will have the same issue.
- (d) With ideal condition (b) and (c) still cannot satisfy the technical requirements. The real world Internet connection is very much more unpredictable and unstable. Therefore, it is un-operatable to put Dantu's server (fig.1, 13) on Internet and rely on Internet connection to communicate between servers (fig.1, 13) and routers (fig.1, 14 and 16) of wireless network.
- (e) Putting servers on Internet is against Dantu's purpose. The purpose of Dantu is to adding routing features to current switching cellular base station with MPLS (IP

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Network) (virtual path LSP switching) function to solve cellular wireless network bandwidth and stability issue at "cell site level" (see col.3 lines 34-62).

(f) Even if one can put all the all the control layer 13 of Dantu on the Internet, then the inter connection between layer 13 and 14 need to be Internet connection, a special router/gateway device is needed for layer 14 and below network/equipments to access Internet, even if so, wireless router 16 and cell site 18 are still not directly connected to the Internet, the new design still does not provide Internet access for mobile device 44 the same as the applicant's current invention.

(g) Still further, referring to Dantu fig.2 the suggested manner (from last OA) of combine Dantus with Crowcroft is physically impossible; Fig.2 shows the complete system of Dantu's disclosure, and it is already a complete system and functional in itself, and there is no reason and no place to add or replace any part of the system with Internet network or Internet connection.

In conclusion, the applicant respectfully submits that "The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify Dantu by clarifying that it is well known in the art prior to applicant's invention to implement the control layer applications 13 on server on the Internet" as point out by last OA is impossible and therefore is improper. And also, the applicant respectfully suggest that "it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teaching would be to use a common protocol such as IP to provide control layer services. In particular, Dantu cures the above-cited deficiency by providing a motivation shown e.g., in figure 1 with respect to an IP network." as point out by last OA is improper.

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Therefore, the applicant submits that last OA rejects Claim 28 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft is improper.

- 5 Accordingly applicant submits that claim 28 does comply with § 103 and therefore requests withdrawal of this rejection.

Regarding Rejection of claim 29

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The last OA point out "Dantu teaches mobility management, see e.g., top of column 7".

- 15 Dantu's mobility in detail is complete different with the roaming function of the applicant's current invention (Col.6, line 60 – col.7, line 26), as "In operation, the wireless routers 30 each have a defined bandwidth with which to communicate with the mobile devices 44 in the cells 40. The bandwidth is used by the wireless router 30 and the mobile devices 44 to communicate voice and data information. The supported bandwidth is a function of various factors such as frequency reuse, carrier to interface ratio, bit-energy to noise ratio, effective bit-rate per connection and the like. The bandwidth available to allocate to certain flows is geo-location dependent, and time dependent based on current usage of other flows in the geo-neighborhood."
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- The wireless routers 30 each allocate bandwidth within a corresponding cell 40, route traffic to and from the cell 40, and track the location of the mobile devices 44 within the cell 40. The position of a mobile device 44 may be determined using network-assist, global position systems (GPS) and radio frequency fingerprinting. Preferably, the positioning technique provides fast and accurate information with respect to the location of the mobile device 44 to minimize acquisition time for position information.
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As mobile users move from cell 40 to cell 40, the wireless routers 30 perform soft handoff operations to provide continuous connectivity within the network..."

Referring to other discussions before, Dantu provides a wireless cellular system with MPLS implemented on wireless router (really a cell site base station) (fig. 1, 18, 16 and fig.2, 30, 32, 40). Dantu is not Internet and Internet connection based solution, the mobile unit 44 cannot roam around the global Internet. Dantu and the applicant's current invention are complete two different systems, therefore the roaming including other mobility management of mobile device around the service network are different. Specifically, Dantu teaches mobile management around a cellular phone network, such as "micro mobility", according to Dantu (col.3, col.4 line 3-10) "Still another technical advantage of the present invention includes providing an improved micro mobility method and system within a wireless communications network ... mobility management is distributed to and efficiently handled at the cell sites."; the applicant's current mobile roaming is for PMAD devices roaming around TDMN and the Internet. E.g. in the applicant's current invention, there is no primary and secondary router (AP) needed for handoff, because communication is in TDMN, it has the capability to guarantee the message delivery, handoff is much less important. However, in Dantu's MPLS virtual circuit/path switch protocol base station communication, handoff is critical. If not handled properly, drop call and data loss is very easy. (col.3, lines 10-17) "The active set of wireless routers includes a primary wireless router and one or more secondary wireless routers for soft handoff of the call. The primary and secondary wireless routers are informed of their status. Virtual paths are configured between the primary and secondary wireless routers. Resources in the primary and secondary wireless routers are allocated for the call." and (col.3, line 64 – col.4 line 2) "providing an improved method and system for performing handoffs in a wireless network. In particular, the wireless routers set up MPLS or other virtual paths on a per call basis to perform traffic selection and distribution for soft handoffs. The MPLS paths improve the speed and efficiency of soft handoff operations in the wireless network."

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In conclusion, Dantu's mobile management over cellular phone network has to rely on MPLS implementation not Internet TCP/IP, this is a fundamental different from the application's PMAD mobile function over TDMN and Internet. System functional blocks are much different, such as primary and secondary router (AP) needed for handoff, and so on.

Therefore, the applicant submits that last OA rejects Claim 29 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft is improper.

Accordingly applicant submits that claim 29 does comply with § 103 and therefore requests withdrawal of this rejection.

The Rejection of claim 30

The last OA noted "see similar rejection to claim 28. In addition, the examiner notes that the Time Distributed Message Network and Internet are simply domains within the Internet, see e.g., figure of Crowcroft.)."

Referring to discussions above, especially responds of claim 28, the applicant respectfully points out that TDMN is a special communication network operating on Internet in form of server domain for PMAD communication purpose.

Similar to responds to rejection of Claim 28, the applicant respectfully suggest the last OA rejects Claim 30 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft is improper.

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Accordingly applicant submits that claim 30 does comply with § 103 and therefore requests withdrawal of this rejection.

5 **The Rejection of claim 31**

The last OA noted " it would have been obvious and well known in the art to perform buffering on a server on the Internet. As such, the technical line of reasoning would be that by buffering data, the data is not lost (i.e., there is no interruption of data)."

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A proper communication system design is necessary to ensure communication data with no loss, not every communication can buffer the data over Internet, and even if doing so, the implementation needs to facilitate the communication of each system needs. E.g. Dantu has an IP network based on MPLS, technically it neither is possible to buffer any MPLS packet in the network nor is MPLS designed to be buffered. In fact, any LSP duplicated packet running in a MPLS (IP network) will cause network malfunction.

20 The data buffering feature of the applicant's current invention is implemented as key part of the whole system function to ensure the communication among PMADs.

Also referring to response to rejection of Claim 28, the applicant's current invention is a complete different communication with Dantu's.

25 Even if Dantu want to buffer mobile "calls" with a server over Internet, a special server and Internet connection is needed. This brings up the question where to put the server and how to connect Internet to Dantu's system (fig.2) and then to wireless router (base stations). Even further if Dantu can find a way to connect buffering server and Internet connection, the new buffering feature is needed to be managed somehow, and the

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old control server layer (fig.1, 13) is not designed to do so, more importantly, buffering packet breaks down MPLS virtual path destroy the main purpose of implementing MPLS wireless router (base station). Because, technically, buffering data over Internet requires data to be communicated on TCP/IP. This means the transmitting MPLS has to be terminated at edge of network to Internet; then the second half of TCP/IP transmission will need another MPLS path to reach out the receiving mobile unit in Dantu's network. Vice versa, the loop back of TCP/IP needs two more paths of MPLS. This means buffering Dantu's communication over Internet needs 4 MPLS data paths instead of 1 of original design. Even if this is possible, a very complicated edge equipment and very special software are needed to manage the new communication scheme.

In conclusion, it's impossible to implement Internet connection buffering communication packet for Dantu as suggested by last OA. Therefore, the applicant respectfully suggests the last OA rejects Claim 31 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft is improper.

Accordingly applicant submits that claim 31 does comply with § 103 and therefore requests withdrawal of this rejection.

The Rejection of claim 32

The last OA noted "the wireless and wireline network further support QoS, see e.g., column 5, lines 33-45 with respect to QoS manager and column 11 lines 13-31", It is well known that Qos management is essential to all communication system. However, different system has different implementation to meet the purposes. According to Dantu (column 5, lines 33-45) "the wireless network 10 includes a service layer 12, a control layer 13, a wireline router layer 14, a wireless router layer 16, and a physical layer 18. The service layer 12 provides network services such as ..., and other

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suitable services." And (fig.6 and column 11 lines 13-31) "In one embodiment, the traffic controller 154 includes a QoS engine 160, ... The QoS engine 160 manages transmission resources within the wireless router 30. The QoS engine 160 may include a dynamic flow manager, a performance monitor, a dynamic bandwidth estimator and a multiple dimension resource queuing system for processing and handling traffic. Further information regarding the network information base ... previously incorporated by reference."

Clearly, Dantu's system has all the necessary Qos of cellular network service. However due to non Internet based system architecture, Dantu's Qos management function blocks do not and cannot have the ability to deal with extremely variable Internet networking condition. Because of system difference between the applicant's current invention and Dantu's, the Qos is different. E.g. In the applicant's current invention, main Qos functions are in TDMN domain, because it is very hard to control AP's uplink Internet connection speed, therefore the mobile access speed. Everything is done in TDMN to control and improve the quality. However, Dantu's cellular network has all the means to control Qos at base station level (see, fig.6, 160)

Therefore, the applicant respectfully submits that the last OA reject Claim 32 over under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") is improper.

Accordingly applicant submits that claim 32 does comply with § 103 and therefore requests withdrawal of this rejection.

Claim rejections 35

As to claim 35, the last OA points out "see similar rejection to claim 29"

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Referring to responds above especially on rejection to claim 29, the applicant respectfully submits that the last OA reject Claim 35 over under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") is improper.

- 5 Accordingly applicant submits that claim 35 does comply with § 103 and therefore requests withdrawal of this rejection.

Claim rejections 44

- 10 As to **claim 44**, the last OA points out "see similar rejection to claim 31"

Referring to responds above especially on rejection to claim 29, the applicant respectfully submits that the last OA reject Claim 44 is improper.

- 15 Accordingly applicant submits that claim 44 does comply with § 103 and therefore requests withdrawal of this rejection.

Claim rejections 45

- 20 As to **claim 45**, the last OA points out "see e.g., figure 3 of Dantu where virtual control security data links are setup for a call."

- As discussed before, Dantu's system is not Internet network and Internet connection based communication system, and it is completely different from the applicant's current invention, even though, Dantu implements two MPLS LSP virtual links (see
25 fig.3). Those are different with the TCP/IP based virtual date link over the entire Internet; where the applicant's virtual date link can be encrypted with many different scheme; where Dantu's two types of MPLS paths (fig.3, and description) to the applicant's best understanding are not security encrypted at all, and they don't need to because of MPLS switching nature.

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Therefore, the applicant respectfully submits that the last OA reject Claim 45 over under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") is improper.

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Accordingly applicant submits that claim 45 does comply with § 103 and therefore requests withdrawal of this rejection.

Claim rejections 47

10 As to **claim 43**, the last OA points out "see similar rejection to claim 29"

Referring to responds above especially on rejection to claim 29, the applicant respectfully submits that the last OA reject Claim 47 over under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") is improper.

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Accordingly applicant submits that claim 47 does comply with § 103 and therefore requests withdrawal of this rejection.

Objections to the rejection of Claim 33

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The last OA rejects Claim 33 under 35 U.S.C. 103(a) as being unpatentable over Dantu in view of the "The Internet: a tutorial" to Crowcroft in further view of "Domain-based access control for the distributed computing systems" to Robinson et al. ("Robinson").

25 The last OA agrees "Dantu and Crowcroft are silent or deficient to the further limitation of using a three-level hierarchical domain system." However, the last OA further points out that "Robinson teaches the further recited limitation above at e.g., figure 3."

21

"The proposed modification of the above-applied reference(s) necessary to arrive at the claim subject matter would be to modify Dantu and Crowcroft by clarifying that server means also forms a three-level hierarchical domain."

- 5 Referring to other responds before, the applicant respectfully point out that Dantu cannot be combined with Crowcroft.

The applicant respectfully point out that it is not hard to implement domains in a large network. However, domain architectures are different in many ways depending on the
10 feature and purpose:

- 1) Referring to Robinson (fig.3) inter-domain functional management mutual support (e.g. distributed computing systems) is essential to form domains in a hierarchical structure.
- 2) Dantu's server are not running on Internet, it is not a Internet based domain,
15 accessible and manageable world-wide
- 3) Dantu's servers are all (and necessary) on the same level (fig.3, 80 and 82-89), by the function there is no inter-server management hierarchical relationship, e.g. call agent server (fig.3, 86) has nothing to do with Wap server (fig.3, 84), etc. It is impossible and no need to make it in hierarchical structure.
- 20 4) There is no need to implement server domains in Datus's embodiment. Because in Dantus, each server handles independent functions (fig.3, 80) and communication is primary handled by Router 30 locally to improve with bandwidth efficiency by MPLS IP communication. It impossible to implement any type of server domain to "help" router deal with MPLS packets. Nor it's
25 necessary.

In conclusion, Dantu's servers cannot be combined with Crowcroft and Robinson as suggested be last OA into hierarchical domain structure; and is complete different with the applicant's three-level hierarchical domain system for providing TDMN message communication and handling efficiency.

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Therefore, the applicant respectfully suggest that the last OA rejects Claim 33 under 35 U.S.C. 103(a) as being unpatentable over Dantu in view of the "The Internet: a tutorial" to Crowcroft in further view of "Domain-based access control for the distributed computing systems" to Robinson et al. ("Robinson") is improper.

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Accordingly applicant submits that claim 33 does comply with § 103 and therefore respectfully requests withdrawal of this rejection.

Objections to Claim rejections 34 and 46

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The last OA rejects Claim 33 under 35 U.S.C. 103(a) as being unpatentable over Dantu in view of the "The Internet: a tutorial" to Crowcroft in further view of U.S. Patent No. 6,360,093 B1 to Ross et al. ("Ross").

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Regarding to claim 34

The last OA notes "Dantu and Crowcroft disclose limitations in the base claim."

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Referring to responds on the rejection of Claim 30, the applicant respectfully point out that it is improper to combine Dante with Crowcroft, and the base claim does comply with § 103.

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Further, the last OA agrees that Dantu and Crowcroft "are silent or deficient to the further limitation of wherein said a plurality of PMADs can perform group communication." However, the last OA further points out "Ross teaches the further recited limitation above at e.g., figure 3 and column 1, line 66 – column 2, line 14"; and the last OA further proposes "modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be modify Dantu and Crowcroft by clarifying that it well known in the art to perform group communication over the Internet"

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The applicant respectfully point out, referring to responses to all other rejections above, it is technically impossible to implement Dantu's embodiment on to Internet, and it is improper to combine Dantu and Crowcroft.

- 5 The last OA further notes "As such, the examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teaching would be to provide push-to-talk services. In particular, Ross cures the above-cited deficiency by providing a motivation found at e.g., column 1, lines 66 – column 2,
10 14"

- According to Ross (column 1, line 66 – column 2, line 14), "... have overcome this limitation by combining wireless telephone service with the Internet, or an Intranet or Extranet. A wireless telephone digitizes the voice of the user in response to the depression of a
15 push-to-talk button, either physical or virtual. It sends the digitized voice, in data mode, to a base station. The base station places the data, through the Internet, or an Intranet or Extranet, on a server. Other wireless telephones recover the data from the server ... The server can dynamically designate any wireless telephone (or landline emulation) as the broadcaster, and can dynamically configure any set of telephones/emulations as the receivers of the broadcast."
- 20 Clearly, in order to do group communication, base stations required to be connected to server via Internet or Intranet.

Regarding to combining references as suggested by last OA:

- 25 1) Both Dantu and Ross are cellular phone based communication system, they are different with the applicant's current invention which is based on Internet and Internet connections.
- 2) Dantu's wireless router (base station) cannot provide direct Internet access for mobile unit 44 (see fig.1, and fig.2)

24

- 3) Because of cellular base station depending, Ross mobile PTT phone cannot roam around/over the Internet, not even between different cell phone network/provider.
- 4) It is possible to combine Dantu with Ross, since both are cellular phone based solution. Referring to Fig.3 of Ross, it is ok to adding server 312 to layer 13 of Dantu (fig.1) providing group communication with PTT phones of Ross (Fig.3, 302, 304, 306), however it cannot be consider as obvious because it is too much technical involving to combine Dantu with Ross as suggested by last OA, as:
- a. Adding new server alone on layer 13 of Dantu will cause a lot of technical involvements because special communication path need to created over Dantu's MPLS scheme for PTT group communication service (connecting via Intranet, as teaches by Ross)
 - b. PTT functional mobile phone need coexist with non-PTT type phone of Dantu, not sure if they are going to use same communication protocol, and same multiple MPLS virtual circuits
 - c. The communications for WRs' (fig.3) also need a lot modification for doing PTT group communication. Such as, MPLS and air QOS/CALL PROCESSING (Fig.4A-5B) needs redesign and may not work.
 - d. Further, wireless router/base station 30 (Fig.6 of Dantu) needs a lot change to accommodate mobile communication with PPT group talking and regular calls, e.g., Qos Engine 160 will sure needs change, and so on.
 - e. New addressing scheme needed to be design and implement in Dantu for routing the group communication session over to Internet (if to put PTT server on Internet) via some new Internet connection (not available in Dantu's current embodiments) and backward re-addressing feature is needed for the receiving mobile unit to participate the group talk.

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f. If fact, Nextel is the only PTT cell phone provider for many years, Verizon introduced PTT service last year, still no other carrier has such service till now, not even AT&T. It is very hard to implement PTT with cell phone system.

- 5 5) Even if Dantu can be combined with Ross for providing mobile phone PTT group communication, the new system still a cellular phone communication, and is different with the applicant's current invention which complete system is based on Internet providing broadest group communication feature at lowest cost and not involve cellular mobile network.
- 10 6) The applicant's current invention is able to perform group communication as Ross without involving a wireless cellular phone communication whether legacy type (like the one Ross has) or Dantu's wireless MPLS switch routing type, instead, the applicant's current invention uses Internet to provide the biggest world coverage and flexibility of the communication. The applicant suggests
- 15 that the fact that last OA is trying to combine all three references together to provide group mobile communication is in favor of applicant.
- 20 7) Ross's PTT service lack of message communication guarantee feature, the PTT communication is interrupted frequently due to cell phone signaling and other type of communication throughput problem (still today, the cellular PTT service bares communication broken and unstable issue). Therefore the group communication is not guaranteed. Therefore further, even if Dantu is to combine with Ross, the new system can only provide non-guaranteed group communication.

25 In conclusion, it would be too much of technical involvement to combine all the references even if it is possible of doing so. Further, even if it is possible to combine the references as suggested by last OA, the new system would become a push-to-talk group communication over a MPLS based cell phone network with servers on Internet, which is much different from the embodiment of the applicant's current invention.

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Therefore, the applicant submits that last OA rejects Claim 34 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of U.S. Patent No. 6,360,093 B1 to Ross et al. ("Ross") is improper.

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Accordingly applicant submits that claim 34 does comply with § 103 and therefore requests withdrawal of this rejection.

Regarding to **claim 46**

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The last OA note "see similar rejection to claim 34"

Referring to responds to rejection to claim 34, the applicant submits that last OA rejects Claim 46 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of U.S. Patent No. 6,360,093 B1 to Ross et al. ("Ross") is improper.

15

Accordingly applicant submits that claim 46 does comply with § 103 and therefore requests withdrawal of this rejection.

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Objections to The Claim rejections 36-40, and 43

The last OA rejects Claim 33 under 35 U.S.C. 103(a) as being unpatentable over Dantu in view of the "The Internet: a tutorial" to Crowcroft in further view of U.S. Patent No. 6,992,982 B1 to Meyer et al. ("Meyer").

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Regarding **claim 36**

The last OA notes "see similar rejection to claim 28"

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Please see refer to responds to rejection of Claim 28.

Further, the last OA agrees that "Dantu and Crowcroft are silent or deficient to the further limitation of using a three-level hierarchical domain system."

5 Referring to response to rejection of claim 33, Dantu cannot and does not need to implement servers in hierarchical domain system. Therefore, as agreed by the last OA, Dantu even if could be combine with Crowcroft, the system different in server domain functionality from the applicant's current invention, therefore the complete system is different.

10 However, the last OA notes "Meyer teaches the further recited limitation above at e.g., the abstract. See also figure 4 where the packets are sent over the Internet",

"The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be modify Dantu and Crowcroft by clarifying that it is well known in the art to divided up messages before sending them over the Internet."

15 "As such, the examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to improve communications over the Internet. In particular, Meyer cures the above-cited deficiency by providing a motivation found at e.g., column 3, lines 27-33."

20

To the applicant's best understanding, the last OA proposes running Meyer's communication protocol over Dantu's system to improve communication over the Internet.

25 The applicant respectfully points out that the suggestion to combine the references should not come from applicant was forcefully stated in Orthopedic Equipment Co. v. United States, 217 U.S.P.Q. 193,199 (CAFC 1983):

"It is wrong to use the patent in suit [here the patent application] as a guide through the maze of prior art references, combining the right references in the right way to achieve the result of the claims in suit [here the claims pending].

28

Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law [here the PTO]."

Regardless the fact the Dantu cannot be combine with Crowcroft to become a Internet based system as discussed in respond to other claim rejections above (such as
5 responds to rejection of claim 28), it is impossible to combine Dantu with Meyer, because: Meyer is host to host peer to peer communication over one host at cellular wireless network, and the other regular host at other side of Internet (see fig.4). If Dantu implements Meyer's method to improve mobile 44 to mobile 44 communication, this would not be necessary, Dantu's own disclosure is to solve this problem at cell
10 site level with MPLS wireless router system (referring all discussions above, and Dantu col.3, lines 57-62). If Dantu would implement Meyer for better communication between a mobile 44 with other host over the Internet, this would be a complete different than the applicant's current invention where TDMU protocol is to guarantee the communication among PMADs over the Internet. Please see still further detail
15 discussion on other aspects below:

- 1) Dantu uses MPLS/IP as virtual switching path addressing, it is technically impossible to implement Meyer without adding more devices and changing the system.
- 2) Specifically, Dantu's system needed to be modified in the way taught by Meyer,
20 such that mobile sending data NOT in TCP/IP protocol. If so, a new way of MPLS implementation needs to be created. Even if that is possible, it would take tremendous amount of technical involvement. Even if still possible, the mobile management method communicate with server layer needed be changed, because the new combination brings different retransmission
25 scheme, the old server function needed to be modified, however, Meyer did not teach such technique (Meyer embodiment is a host to host peer-to-peer scheme, fig.4). Therefore it still would not work. Therefore, combine Dantu with Meyer, would not justified a system running on Internet, a lot new elements needed to be added to Dantu, and even if so, new combination may not still

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work because new MPLS implementation need to be created and implemented in order to carry Meyer's protocol.

3) Meyer's disclosure improves the TCP retransmission timeout issue.

Specifically, Meyer solves cross mobile wireless network and Internet host communication issue. (fig.4, and col.7 line 11-28). However, due to tight Qos management wireless router (base station), this may not be necessary and adequately, because:

a) Dantu use TCP as part of MPLS implementation. Dantu dose his own TCP control in his embodiment, and implement as carrier base of key Qos. There is only two way to combine Meyer to Dantu: (a) adding Meryer's protocol to Dantu, this will result in Meyer conflicting with existing TCP implementation (b) replacing current TCP implementations with Meyer, (eg. Fig.7, 202 and 212; fig.19, 512), however, doing so will result in a lot of significant and fundamental system changes. (e.g. fig.7 block of "SELECTOR RADIO TO IP PACKET, SAR PACKET ASSEMBLY" as well as 212, 202, and relating 200, 206 and so on, needed to be complete redesign in order to facilitate new Meyer protocol.)

b) Dantu's wireless router (base station) does not need Meyer's technique, even Meyer himself recognize this by: "It may also be noted that the transmission delay over the wireless network is often a considerable fraction of the end-to-end delay between the sending and receiving peer of the transport layer protocol" (see col.7, lines 29-32). Meyer solves problem at transport layer protocol, it has not relevant to Dantu who focuses on physical and link layer problem solving. Dantu's system is a complete solution; there is no need for Dantu to add any transport layer protocol for "call" switching nor possible of doing so.

c) Multiple protocol and paths are designed in Dantu's disclosure (fig.3, 4A, 4B,4C, 5A and 5B). Clearly, Dantu cannot and does not need to implement Meyer in one, or partial, of all of the protocols and paths with the way

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Meyers teaches. Because, any of the protocol change will result in communication management change, new server means need to add to Dantu in order to manage the new change, and it is not clear old server needs to be remove, and how much more complication work is needed to make the whole system work.

- d) Meyer only improves protocol (in particularly TCP/IP) of retransmission mismatch (see fig.3). In the view of protocol stacking, Meyer improves the protocol race situation as "In the situation of FIG. 4, due to the ARQ being used at the link layer, a race condition is generated between the link layer and the transport layer: while the link layer retransmits data, the transport retransmission timer might expire, leading to a spurious time-out. The retransmissions at the link layer can be due e.g. to transmission errors or to data loss because of handovers. (col.7, lines 22-28)" Meyer's disclosure solves retransmission disorder problem, but cannot solve the problem when any of communication link is interrupted. (e.g. Fig.4, RCL or TCP is broken). "... the present invention to improve the communication in a system using a communications protocol that specifies the acknowledgment of sent data and specifies a data loss detection function, such as a time-out function or a duplicate acknowledgment response function." (column 3, lines 27-33)

In conclusion, the applicant submit it is impossible and improper to combine Dantu, Crowcroft and Meyer in the proposed manner, and even if they could be combined, the new system is still different from the applicant's current invention and lack of key functions, e.g. mobile to mobile communication over Internet without wireless cellular phone network. The Claim 36 hence is unobvious and patentable over These References Under § 103

Applicant submit that the fact that the last OA suggests combination means that a mobile communication over the Internet need special implementation of system in

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order to overcome the Internet communication issue; However, non of Dantu and Meyer solves the problem, not even if they could be combined. Therefore, the suggestion of the last OA is in favor of *applicant*, because it proves that suggested combination still cannot achieve the function of the applicant's current invention hence
5 is unobvious.

Therefore, the applicant submits that last OA rejects Claim 36 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of Meyer is improper.
10

Accordingly applicant submits that claim 36 does comply with § 103 and therefore requests withdrawal of this rejection.

As to claim 37, the last OA points out "see e.g., Meyer where the packets are
15 segmented and then reassembled at the host."

Referring to the responds of rejection of claim 36, and all the other discussion above, Meyer's packets segments are different with the message units in the applicant's current invention.

20 Therefore, the applicant submits that last OA rejects Claim 37 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of Meyer is improper.

Accordingly applicant submits that claim 37 does comply with § 103 and therefore
25 requests withdrawal of this rejection.

As to claim 38, the last OA point out "see similar rejection to claim 36 where the TDMUs are the segments sent over the network"

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Referring to the responds of rejection of claim 36, due to system differences, the TDMUs of the applicant's current invention are segments sent over Internet and TDMN. TDMU is build on top of TCP/IP protocol as part of key communication implementation of the applicant's current invention. It is not just any message network
5 segment, and it is different with the packet of Meyer which is designed to replace TCP protocol.

Therefore, the applicant submits that last OA rejects Claim 38 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The
10 Internet: a tutorial" to Crowcroft in further view of Meyer is improper.

Accordingly applicant submits that claim 38 does comply with § 103 and therefore requests withdrawal of this rejection.

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As to **claim 39**, the last OA points out "see similar rejection to claim 31"

Referring to the responds of rejection of claim 31, the applicant submits that last OA rejects Claim 39 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No.
20 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of Meyer is improper.

Accordingly applicant submits that claim 39 does comply with § 103 and therefore requests withdrawal of this rejection.

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As to **claim 40**, the last OA points out "see similar rejection to claim 32"

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Referring to the responds of rejection of claim 32, the applicant submits that last OA rejects Claim 40 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of Meyer is improper.

5

Accordingly applicant submits that claim 40 does comply with § 103 and therefore requests withdrawal of this rejection.

As to claim 43, the last OA points out "see similar rejection to claim 29"

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Referring to responds to rejection to claim 29, the applicant submits that last OA rejects Claim 43 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of Meyer is improper.

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Accordingly applicant submits that claim 43 does comply with § 103 and therefore requests withdrawal of this rejection.

20 **Regarding claim 41**

The last OA also rejected Claim 41 under 35 U.S.C. 103(a) as being unpatentable over Dantu in view of the "The Internet: a tutorial" to Crowcroft in further view of U.S. Patent No. 6,992,982 B1 to Meyer et al. ("Meyer") and in further view of "Domain-based access control for the distributed computing systems" to Robinson et al. ("Robinson"). And "as to claim 41, see similar rejection to claim 33."

25

As discussed above, especially referring to responds of rejections on Claim 28, 33 and 36, the applicant respectfully summaries:

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- 1) It is impossible to combine Dantu with Internet access and connection, therefore cannot be combined with Crowcroft to become an Internet based system, even though Dantu's disclosure is a MPLS based IP system.
- 2) There is not technical reason and possibility to implement Dantu's servers (fig.1, 13) into hierarchical domain architecture as teaches by Robinson.
- 3) Further, Meyer's solution is not needed in Dantu's system, since the implementation of MPLS wireless router is to solve the bandwidth communication problem at cell site level. Combining of Meyer to Dantu not only duplicate the purpose, but also result in big scale of system redesign and a lot new elements need to be add to fit the purpose.

Therefore, the applicant submits that last OA rejects Claim 41 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft in further view of "Domain-based access control for distributed computing systems" to Robinson is improper.

Accordingly applicant submits that claim 41 does comply with § 103 and therefore requests withdrawal of this rejection.

Regarding claim 42

The last OA also rejected Claim 42 under 35 U.S.C. 103(a) as being unpatentable over Dantu in view of the "The Internet: a tutorial" to Crowcroft in further view of U.S. Patent No. 6,992,982 B1 to Meyer et al. ("Meyer") and in further view of U.S. Patent No. 6,360,093 B1 to Ross et al. ("Ross"); and " as to claim 42, see similar rejection to claim 34."

On the base of responds to rejection of claim 34, the applicant's respectfully submit that, even though, all the references introduced by last OA cannot be physically

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combined, the fact that large number of references must be combined as suggested by last OA to meet the invention is evidence of unobviousness.

Therefore, the applicant submits that last OA rejects Claim 42 under 35 U.S.C. 103(a)
5 as being unpatentable over U.S. Patent No. 7,068,624 B1 ("Dantu") in view of "The Internet: a tutorial" to Crowcroft is improper.

Accordingly applicant submits that claim 42 does comply with § 103 and therefore requests withdrawal of this rejection.

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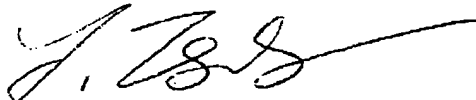
Conclusion

For all of the above reasons, the applicant submits that the claims are all defined
5 patentably over the prior art. Therefore he submits that this application is now in
condition for allowance, which action he respectfully solicits.

Conditional Request for Constructive Assistance

10 Applicant respectfully submits that the claims of this application are proper, and
defined novel structure which is also unobvious. If, for any reason this application is
not believed to be in full condition of allowance,
Applicant respectfully request the constructive assistance and suggestions of the
Examiner pursuant to M.P.E.P. § 2173.02 and § 707.07(j) in order that the
15 undersigned can place this applicant in allowable condition as soon as possible and
without the need for further proceedings.

Very respectfully,



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20

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Date: 2007 March 22

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